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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/993,976	11/05/2001	Milton B. Yatvin	99,297	7958

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EXAMINER	
JIANG, SHAOJIA A	

ART UNIT	PAPER NUMBER
1617	

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8

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/993,976	YATVIN ET AL.	
	Examiner	Art Unit	
	Shaojia A. Jiang	1617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 January 2003* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-33* is/are pending in the application.

4a) Of the above claim(s) *12-17 and 20-33* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-11,18 and 19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Election/Restrictions

Applicant's election of the invention of Group I, Claims -11 and 18-19, and the invention of species of melatonin conjugated to felbamate for treatment of epileppsy in Paper No. 7, submitted January 27, 2003 is acknowledged.

Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

On consideration by the examiner, the specie election requirement is modified to include all compounds or agents in the instant claims.

Claims 12-17 and 20-33 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim.

The requirement is therefore made FINAL.

Claims 1-11 and 18-19 are examined on the merits herein.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3-5, 7-9 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Yatvin et al. (US 5,149,794, PTO-892).

Yatvin et al. discloses a pharmaceutical composition comprising an antiviral or an anti proliferative or antineoplastic drug, and two linker functional groups and a spacer, wherein the spacer has a first end and a second end and wherein the amino acid or amino acid derivative is attached to the first of the spacer through a first linker functional group and the drug is attached to the second end of the spacer through a second linker functional group (see particularly Fig.1-8; Examples 1-8; claims 1 and 7). Yatvin et al. also discloses that the instant spacer allows the drug to act without being released at an intracellular site or allows the facilitated hydrolytic release of the drug at an intracellular site wherein the first linker functional group attached to the first end of the spacer is strong and the second linker functional group attached to the second end of the spacer is weak (see particularly claims 2-3 therein). Yatvin et al. also discloses that the instant first functional linker group is a hydroxy group, a primary or secondary amino group a phosphate group or a carboxylic acid group (see claims 8-9) and that the instant spacer is a peptide for (amino acid)n formula (see claim 6).

Thus, Yatvin et al. anticipates Claims 1, 3-5, 7-9 and 18.

Claims 1-5, 7-9, 11 and 18-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Yatvin et al. (US 5,543,389, PTO-892).

Yatvin et al. discloses a pharmaceutical composition comprising an antiviral or an antiproliferative drug such as the particular drug, methotrexate, and two linker functional

groups and a spacer, wherein the spacer has a first end and a second end and wherein the amino acid or amino acid derivative is attached to the first of the spacer through a first linker functional group and the drug is attached to the second end of the spacer through a second linker functional group (see particularly Fig.1; Example 1; claims 1-24). Yatvin et al. also discloses that the instant spacer allows the drug to act without being released at an intracellular site or allows the facilitated hydrolytic release of the drug at an intracellular site wherein the first linker functional group attached to the first end of the spacer is strong and the second linker functional group attached to the second end of the spacer is weak (see particularly claims 10-11 therein). Yatvin et al. also discloses that the instant first functional linker group is a hydroxy group, a primary or secondary amino group a phosphate group or a carboxylic acid group (see claims 19-21) and that the instant spacer is a peptide for (amino acid)n formula (see claim 13). Thus, Yatvin et al. anticipates Claims 1-5, 7-9, 11 and 18-19.

Claims 1-5, 7-9, 11 and 18-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Yatvin et al. (US 5,543,389, PTO-892).

Yatvin et al. discloses a pharmaceutical composition comprising an antiproliferative drug such as the particular drug, methotrexate, and two linker functional groups and a spacer, wherein the spacer has a first end and a second end and wherein the amino acid or amino acid derivative is attached to the first of the spacer through a first linker functional group and the drug is attached to the second end of the spacer through a second linker functional group (see particularly Fig.1; Example 1; claims 1-

24). Yatvin et al. also discloses that the instant spacer allows the drug to act without being released at an intracellular site or allows the facilitated hydrolytic release of the drug at an intracellular site wherein the first linker functional group attached to the first end of the spacer is strong and the second linker functional group attached to the second end of the spacer is weak (see particularly claims 10-11 therein). Yatvin et al. also discloses that the instant first functional linker group is a hydroxy group, a primary or secondary amino group a phosphate group or a carboxylic acid group (see claims 19-21) and that the instant spacer is a peptide for (amino acid)n formula (see claim 13). Thus, Yatvin et al. anticipates Claims 1-5, 7-9, 11 and 18-19.

Claims 1-5, 7-9, 11 and 18-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Yatvin et al. (US 5,827,819, PTO-892).

Yatvin et al. discloses a pharmaceutical composition comprising a psychotopic, neurotropic or neurological drug such as the particular instant drugs, for example L-dopa, hydroxytryptamine, amantadine, benztropine, and levadopa (see in particular claim 2 and 11), and two linker functional groups and a spacer, wherein the spacer has a first end and a second end and wherein the amino acid or amino acid derivative is attached to the first of the spacer through a first linker functional group and the drug is attached to the second end of the spacer through a second linker functional group (see particularly Fig.1-6; Example 1-6; claims 1-12). Yatvin et al. also discloses that the instant spacer allows the drug to act without being released at an intracellular site or allows the facilitated hydrolytic release of the drug at an intracellular site wherein the

first linker functional group attached to the first end of the spacer is strong and the second linker functional group attached to the second end of the spacer is weak (see particularly claims 4-5 therein). Yatvin et al. also discloses that the instant first functional linker group is a hydroxy group, a primary or secondary amino group a phosphate group or a carboxylic acid group (see claims 7-9) and that the instant spacer is a peptide for (amino acid)n formula (see claim 12). Thus, Yatvin et al. anticipates Claims 1-5, 7-9, 11 and 18-19.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 6 and 10, even though these claims are not anticipated by Yatvin et al. (US 5,149,794) as applicable to claims 1, 3-5, 7-9 and 18, are rejected under 35 U.S.C. 103(a) as being unpatentable over the same reference by Yatvin et al.

The same disclosure of Yatvin et al. in 5,149,794 has been discussed above (see supra at page 3).

Yatvin et al. does not expressly disclose the employment of the particular amino acid or derivative herein in the composition therein.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ the particular amino acid or derivative herein in the composition therein.

One having ordinary skill in the art at the time the invention was made would have been motivated employ the particular amino acid or derivative herein in the composition therein since amino acid derivatives such as peptide broadly are known to be employed in the compositions of Yatvin et al. Moreover, one of ordinary skill in the art would clearly acknowledge that amino acid and its derivatives broadly possess at least two functional groups which can be linked to other a hydroxy group, a primary or secondary amino group a phosphate group or a carboxylic acid group. Therefore, one of ordinary skill in the art would have found it obvious to employ the particular known amino acid or derivative herein having the same or similar functional in the compositions of Yatvin et al.

Thus the claimed invention as a whole is clearly prima facie obvious over the combined teachings of the prior art.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double

patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 3-5, 7-9 and 18 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-10 of U.S. Patent No. 5,149,794.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the patent are drawn to a pharmaceutical composition comprising an antiviral or an anti proliferative or antineoplastic drug, and two linker functional groups and a spacer, wherein the spacer has a first end and a second end and wherein the amino acid or amino acid derivative is attached to the first of the spacer through a first linker functional group and the drug is attached to the second end of the spacer through a second linker functional group (see particularly Fig.1-8; Examples 1-8; claims 1 and 7). Yatvin et al. also discloses that the instant spacer allows the drug to act without being released at an intracellular site or allows the facilitated hydrolytic release of the drug at an intracellular site wherein the first linker functional group attached to the first end of the spacer is strong and the second linker functional group attached to the second end of the spacer is weak (see particularly claims 2-3 therein). Yatvin et al. also discloses that the instant first functional linker group is a hydroxy group, a primary or secondary amino group a phosphate group or a carboxylic acid group (see claims 8-9) and that the instant spacer is a peptide for (amino acid)n formula.

Thus, the instant claims 1, 3-5, 7-9 and 18 are seen to be anticipated by the claims 1-10 of U.S. Patent No. 5,149,794.

Claims 1-5, 7-9, 11 and 18-19 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-27 of U.S. Patent No. 5,543,389.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the patent are drawn to a pharmaceutical composition comprising an antiproliferative drug such as the particular drug, methotrexate, and two linker functional groups and a spacer, wherein the spacer has a first end and a second end and wherein the amino acid or amino acid derivative is attached to the first of the spacer through a first linker functional group and the drug is attached to the second end of the spacer through a second linker functional group (see particularly Fig.1; Example 1; claims 1-24). Yatvin et al. also discloses that the instant spacer allows the drug to act without being released at an intracellular site or allows the facilitated hydrolytic release of the drug at an intracellular site wherein the first linker functional group attached to the first end of the spacer is strong and the second linker functional group attached to the second end of the spacer is weak (see particularly claims 10-11 therein). Yatvin et al. also discloses that the instant first functional linker group is a hydroxy group, a primary or secondary amino group a phosphate group or a carboxylic acid group (see claims 19-21) and that the instant spacer is a peptide for (amino acid)n formula (see claim 13).

Thus, the instant claims 1-5, 7-9, 11 and 18-19 are seen to be anticipated by the claims 1-27 of U.S. Patent No. 5,543,389.

Claims 1-5, 7-9, 11 and 18-19 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-12 of U.S. Patent No. 5,827,819.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the patent are drawn to a pharmaceutical composition comprising a psychotopic, neurotropic or neurological drug such as the particular instant drugs, for example L-dopa, hydroxytryptamine, amantadine, benztropine, and levadopa (see in particular claim 2 and 11), and two linker functional groups and a spacer, wherein the spacer has a first end and a second end and wherein the amino acid or amino acid derivative is attached to the first of the spacer through a first linker functional group and the drug is attached to the second end of the spacer through a second linker functional group (see particularly Fig.1-6; Example 1-6; claims 1-12). Yatvin et al. also discloses that the instant spacer allows the drug to act without being released at an intracellular site or allows the facilitated hydrolytic release of the drug at an intracellular site wherein the first linker functional group attached to the first end of the spacer is strong and the second linker functional group attached to the second end of the spacer is weak (see particularly claims 4-5 therein). Yatvin et al. also discloses that the instant first functional linker group is a hydroxy group, a primary or secondary amino group a

phosphate group or a carboxylic acid group (see claims 7-9) and that the instant spacer is a peptide for (amino acid)n formula (see claim 12).

Thus, the instant claims 1-5, 7-9, 11 and 18-19 are seen to be anticipated by the claims 1-12 of U.S. Patent No. 5,827,819.

In view of the rejection to the pending claim set forth above, no claims are allowed.

In view of the rejections to the pending claims set forth above, no claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Jiang, whose telephone number is (703) 305-1008. The examiner can normally be reached on Monday-Friday from 9:00 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreenivasan Padmanabhan, Ph.D., can be reached on (703) 305-1877. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-4556.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-1235.

S. Anna Jiang, Ph.D.
Patent Examiner, AU 1617
April 14, 2003